.





Why it is important to manage data, information and knowledge as a business asset

Every organisation exists to meet its business objectives which is dependent upon delivering value to their clients. Value is created for clients by the organisation delivering its product(s) and / or service(s) at an attractive price, of sufficient quality, in a timely manner. Products and services are created and delivered by conducting the organisation's business activities and processes which are enabled by deploying its scarce and valuable resources.



These resources are the organisation's Financial Assets (money), Physical Assets (property and infrastructure including hardware and software), Human Assets (people) and Information Assets (data, documents, published content and knowledge). The most successful organisations deliver the products and services that create the most value for the customer whilst consuming the fewest resources.





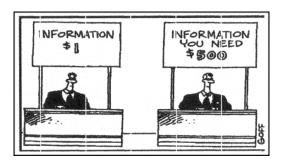
Data, information and knowledge

Contrary to conventional, accounting-based wisdom, the job of management is not to drive business performance. The job of management is to deploy the organisation's scarce and valuable resources in the most efficient and effective manner possible and, if they are, then business performance will follow. Business performance is a lag, not a lead, indicator of good business management.

The effective deployment of assets, should:

- internally / for staff; drive faster processes, facilitate better decisions and improve staff satisfaction
- externally / to clients; improve services, provide new services, reduce price and enable faster delivery
- for the organisation; improve service delivery, increase revenue, reduce costs, increase productivity, provide competitive advantage, mitigate risk and improve compliance

Of the four sets of resources available to organisations, Information Assets are arguably the most important.



Without data, information and knowledge, no business activity can be conducted, no business process can be completed and no business decision can be made.

Information Assets	Structured data	Documents Spreadsheets Email etc.	Published content	Knowledge	Information Assets Architecture
Processing	Applications	Workflow	Content management	Knowledge management	Applications Architecture
Repositories	Finance 1, LV3, Contacts	G:, H: and S: Drives Email	Intranet Extranet Web sites	Subject matter experts	Infrastructure Architecture



Yet Information Assets are managed badly. Australia's largest onshore oil and gas producer estimates that if it managed its money the way it manages its information it would "be broke in a week." A Washington DC based legal firm says that it "would be like that bloke there – invisible, non-existent."

So how is money managed? Money has a framework called the Chart of Accounts. Without it, expenditure could be allocated indiscriminately and to multiple uses so that reporting and management would be impossible. Money is managed through instruments including the Balance Sheet and the Income Statement. The responsibility for spending and managing the money is carefully and tightly delegated by the Chief Financial Officer (CFO) to very few people. The CFO is truly accountable for the organisation's money. Whilst he or she doesn't spend the money, and pardon the pun, the buck stops with them. If the organisation mismanages the money, the CFO will be sacked and if it is misappropriated, they will go to jail. There is true accountability.

The same is true for Human and Physical Assets as per the table below.

Asset or Resource	Framework	Tools	Authority	Accountability
Financial	Chart of Accounts	Balance Sheet Income Statement	Delegation	CFO
Human	Organisation Chart	Roles & Responsibilities KPIs	Line Management	Director HR
Physical	Asset Register	Maintenance and Improvement Programme	Delegation	Property Manager Site Manager IT Manager
Information	Business Classification Scheme	Metadata model Security model Retention Schedule	Authority?	Accountability?

However, the same is not true for Information Assets. Few senior executives know what a Business Classification Scheme is, let alone its profound and strategic value. Information management instruments like metadata and security models are not understood. There is no clearly delegated information management authority. And there is no accountability; there are very few, if any, ClOs who will be sacked if information is not provided to the people who need it in a timely and accurate manner.

The result is poor information management with the consequent loss of revenue, increase in operating cost, acceptance of waste with its negative effect on productivity and impact of risk from inability to meet compliance requirements, compromised cyber security, ineffective discovery and sub-optimal business continuity.

If management's job is to deploy the organisation's valuable resources in the most efficient and effective manner, deciding not to do so is the same as deciding to run the organisation badly. And that is negligent.

When asked about efficiency and productivity over a 10 year period, the Managing Partner of a national legal firm said, "I would say it's at least 10% down." The Chief Executive of a now failed manufacturing company said, "We haven't appointed somebody in a chief information or chief knowledge officer position, because of cost [...]. It's a pretty rudimentary view - a very tactical view given the apparent value I've placed on information. It…doesn't seem sensible does it?" When asked if she would participate in an information management research project the Chair of the Board of a financial institution, which is effectively and information management organisation with a banking licence said, "To be honest, I don't really know much about this area and therefore don't really think I can assist you."



There are many explanations for why information is badly managed that fall into five categories:

- 1. A lack of executive awareness
- 2. A lack of business governance
- 3. Poor leadership and management
- 4. Difficulty in justification
- 5. Inadequate instruments

There is a lack of executive awareness of the importance of information as a business asset and how to manage it effectively. There is little or no formal education and Information Management is not on the curriculum of most universities or the Australian Institute of Company Directors. Further, there is no on-the-job training. Investors and Boards don't ask the right questions and senior management does not have sufficient time to learn about information management.

There is a lack of business, as distinct from information, governance. We define business governance as who makes what decisions. Most organisations have information governance in the form of strategies and policies. However, no matter how good an organisation's policies are, they are irrelevant if the business doesn't value information as a business asset and the policies will sit on the organisation's intranet gathering dust. This lack of business governance is manifested in little if any accountability. In most organisations nobody will be sacked if information is not delivered in an accurate and timely fashion to the people who need it. There is one notable, wonderful exception. SBI General is a six year old collaboration between the State Bank of India (SBI) and Australia's IAG providing insurance products to the savings and loans account holders of SBI. Because it recognised that an insurance company does nothing but manage information, the Board of SBI General offered the organisation's Chief Executive a double digit bonus for meeting data quality objectives. Overnight the quality of the organisation's data went from 68% to between 91% and 93% and the organisation is now selling 1.7 million new policies *per month*. When asked who is IAG's greatest potential competitor is, the CIO answered, fascinatingly, Google – the organisation with possibly the best access to the most information in the world.

Most organisations exhibit **poor leadership in and management of information behaviours**. For the last 30 years, most executives have delegated the responsibility for managing their information to IT who are highly accomplished at managing the infrastructure but they cannot manage the information. The Chief Legal Counsel of an organisation will know more about the practice of Law, more about what information is required to practice Law and be more concerned about the quality of that information than IT. So why do we ask IT to manage this critical business asset without either the skills and experience or the imprimatur to do so?

The **justification** of information management initiatives is difficult. Chief Financial Officers do not know how much it costs their organisations to manage their information. When asked they will say, "That's easy – hardware, software, upgrades, maintenance, support, telecommunications and IT staff salaries." To which the response is, "Well you know that's rubbish and I know that's rubbish, so how much does it cost?" And the answer is, "I don't know." Nor do they know the value of their organisation's information. But that's not easy because the value of information is contextual – temporally, professionally and managerially and that makes calculating its value problematic. Finally, determining the benefit of information management initiatives is difficult. Many organisations will recognise only real revenue increases and cost reductions, not productivity improvements or risk mitigation. The difficulty in justifying information management initiatives is that it's a death by a thousand cuts. Managing one email badly is insignificant but if every person in an organisation manages every email badly, the cost and waste and risk borne by the organisation is enormous. And if you don't know how much it costs to manage your organisation's information assets, it makes it extremely difficult to justify improving that management.



¹ Refer to Doug Laney's work on Infonomics

Finally the **instruments** used by organisations **are** often **inadequate**. The Generally Accepted Accounting Principles do not enable the value of information to be capitalised and included on the Balance Sheet with the result that information is not seen as a tangible asset to be carefully managed. Further, language is imprecise; a university has four different definitions of the term, "Student Commencement." And software is seen as a panacea for information management problems. A national disability services provider has decided to throw out the failed software and replace it with a new ERP tool. Madness is doing the same thing over again and expecting a different result. The Chief Executive of a large US based health organisation said, "You know, I have invested in technology to the point where I can now receive crap at the speed of light."

For many organisations, good information management doesn't pass the "so what?" test. They see no reason to manage information well and certainly no reason to do it now. The point is that good information management does pass the "so what?" test and it passes with flying colours. Organisations just have to recognise it.

The negative implications of poor information management are material and the examples are multitudinous. A project manager of an Australian ASX top 50 energy company gave an excavator driver an obsolete site plan and the teeth of the excavator penetrated the plastic coating of an 11,000 volt cable. A State Government agency was unable to defend an \$18 million breach of contract because it couldn't find the information required to do so. And an oil and gas company accidentally destroyed seismic lines that cost \$6 million each to develop and its inability to provide drawings, wiring diagrams and plant dossiers to its offshore construction contractors incurs a surcharge of between 10% and 25%.

Alternatively, the benefits of good information management are significant. A consulting engineering firm can bill an extra \$2.5 million per year by more productively using 5 minutes per person per day across 2,500 staff at an internal charge-out rate of \$50 per hour. A 34 person winery implemented simple tools including naming conventions and email guidelines. Immediately winery operations staff declared, "This is fantastic. We can find stuff." Productivity was measured delivering an improvement of \$91,000 of time savings in three months by 34 staff totalling \$10,800 per person per year. For a State Government owned finance company FOIs and Ministerials would take many hours, sometimes days, to fulfil. The firm implemented a document and records management system that was properly planned and supported by appropriate instruments and practices, justification and change management with the result that requests for information now take only hours and the CFO can personally respond in minutes. A national legal firm estimates that with improved information management practices it can increase revenue and decrease costs by over \$13,300 per person per year.



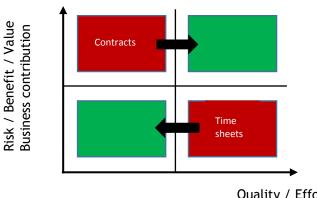
There is lots we can do. We need to convince our work colleagues at operational level and executives at enterprise level that improving information management practice is beneficial to them. Experience Matters' research suggests that, on average, the potential benefits from improving information management practices are up to \$20,000 per employee per year.

We need to work both bottom up and top down. Information professionals of all disciplines have an opportunity, indeed a responsibility, to educate and to build a tsunami of internal support that develops until it can no longer be ignored by senior management. Alternatively, success can be achieved by finding people who are passionate about driving tangible business benefit to their organisations by improving the management of their information assets and who are senior enough to make it both happen and stick. Examples of success are Rycroft Winery and HomeStart Finance.

The steps required include:

- 1. Identify precisely what the business does. This produces a strategically powerful document
- 2. Identify what Information Assets the business uses
- 3. Prioritise Information Assets identify which information is vital
 - a) Identify who captures / creates that information
 - b) Identify who uses that information and for what purpose
 - c) Assess the quality of the information²
 - d) Determine the value of the information and its impact on the business in terms of contribution and risk

This activity can be represented as follows:



Quality / Effort

The effort expended to manage the organisation's Information Assets should be commensurate with the value to the business that the information contributes.

- 4. Develop a vision of the future in terms of information quality
- 5. Build a roadmap to improvement with quick wins as per the diagram. For instance, contracts may be vital to the organisation – high value but not managed as well as they could or should be. That information needs to move from top left to top right. On the other hand, if too much time is being spent on timesheets which deliver little value to the organisation's customers, that time spent should be reduced and so that activity will move from bottom right to bottom left
- Measure improvement and benefits



² Refer to Tom Redman's Data Driven 2008